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Remarks

Applicant appreciates the Examiner's review of the present application. The Examiner has rejected claims 1, 5-15, 23, 24, 35, and 38-42 based upon a combination of U.S. Patent No. 6,740,041 (Faulkner et al) read in combination with U.S. Patent No. 4,631,676 (Pugh) and US Publication No. 2002/0137082 (Lewandrowski). Examiner has rejected the balance of the claims by combining Faulkner, Pugh, and Lewandrowski with a fourth reference.

Applicant respectfully disagrees with Examiner's conclusion that the pending claims are obvious under 35 U.S.C. Section 103(a) based upon, at minimum, the combination of three references. Central to the Examiner's conclusion is the following explanation:

It would be obvious to one with ordinary skill in the art at the time of the invention to combine Faulkner et al., Pugh, and Lewandrowski et al. as all these methods are ways of determining the risk factor of a patient for osteoporosis. The results from the video gait system of Pugh and the results from the bone marker concentration of Lewandrowski et al. can be inputted into the system of Faulkner et al. Using this information the doctor can then determine the patient's risk factor of breaking a bone, or of osteoporosis, and the doctor can also prescribe the most proper therapy depending on the patient's result from the combined information. See, Examiner's Office Action, page 3.

This conclusion, however, has no support in any of the cited references. "To support the conclusion that the claimed invention is directed to obvious subject matter, either the references must expressly or impliedly suggest the claimed

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invention or the examiner must present a convincing line of reasoning as to why the artisan would have found the claimed invention to have been obvious in light of the teachings of the references." *Ex parte Clapp*, 227 USPQ 972, 973 (Bd. Pat. App. & Inter. 1985); see also MPEP 2142.

Specifically, the Faulkner reference does not suggest using data generated from other machines or systems, such as gait information or bone marker information, in combination with a bone densitometer. Faulkner merely instructs the use of demographic data:

These data will generally include quantitative information related to risk of fracture other than BMD and will typically include the age and gender of the patient. The present invention also contemplates, however, the use of additional patient information including, for example, the patient's smoking habits (smoker or non-smoker), the amount of exercise the patient performs, the patient's mobility (for example, how much time the patient is on his or her feet during the day or whether the patient can get out of a chair without using his or her arms, or similar measures), the patient's history and patient's family history of fragility fractures, whether there are crush fractures of patient vertebra, and patient hip axis length. These latter two quantities may be determined alternatively by the scanning process described below and input without physician intervention. Faulkner Reference, Col. 3:20-35; see also Col.4:13-55.

The prescribed additional data is not from another patient measurement system, such as a gait or bone marker measurement unit. Rather, the data is derived from a patient's demographic and personal data or public data sources. It is remarkable, to say the least, that the Examiner combines Faulkner with two other

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references when the Faulkner reference does not even recognize the possible use of gait or bone marker measurements to help determine absolute bone fracture risk. In fact, Faulkner would teach one of ordinary skill in the art that treating a patient having a risk of bone fracture can be done effectively without requiring gait or bone marker information.

Moreover, none of the references describe how gait and bone marker information can be specifically used in combination with an x-ray bone densitometer. In contrast, the present application provides specific treatment processes that define exactly how the three measurements can be integrated or combined. See the Specification, Figures 1A through 1F. While the Examiner concludes a combination of Faulkner, Pugh, and Lewandrowski would be obvious to one of ordinary skill in the art, none of the references describe the relevance of the densitometer, gait, and bone marker data to each other or how the data can be used in combination.

Applicant respectfully submits that the Examiner's use of three, and in some cases four, separate references to reject the pending claims, when none of those references suggest or even imply the desirability of such a combination, is plainly improper.